

14. A method for identifying a compound which binds to a polypeptide selected from the group consisting of:

a) a polypeptide comprising the amino acid sequence of SEQ ID NO:2; and

b) a polypeptide comprising at least 15 contiguous amino acids of SEQ ID NO:2;

the method comprising the steps of:

i) contacting the polypeptide with a test compound; and

ii) determining whether the polypeptide binds to the test compound.

15. The method of claim 14, wherein the binding of the test compound to the polypeptide is detected by a method selected from the group consisting of:

a) direct detection of the binding; and

b) detection of a competitor molecule which disrupts binding of the test compound to the polypeptide.

16. A method for modulating the activity of a polypeptide selected from:

a) a polypeptide comprising having amino acid sequence of SEQ ID NO:2; and

b) a polypeptide comprising at least 15 contiguous amino acids of SEQ ID NO:2;

the method comprising contacting a cell expressing the polypeptide with a compound which binds to the polypeptide in a sufficient concentration to modulate the activity of the polypeptide.

17. The method of claim 16, wherein the activity is recruitment of a caspase.

18. The method of claim 16, wherein the method results in an increase in hexose uptake by the cell.

19. The method of claim 16, wherein the method results in a decrease in hexose uptake by the cell.

20. A method of identifying a compound that modulates the expression of a gene encoding GLUTX, the method comprising the steps of:

a) contacting a cell expressing a gene with a test compound; and

b) detecting the level of expression of the gene in the presence of the test compound, wherein a difference in expression in the presence of the test compound compared to expression in the absence of the test compound indicates that the test compound modulates expression of the gene.

21. The method of claim 20, wherein the compound is selected from the group consisting of polypeptides, ribonucleic acids, small molecules, ribozymes, antisense oligonucleotide, and deoxyribonucleic acids.

22. A method of identifying a compound that modulates the activity of GLUTX, the method comprising the steps of:

a) contacting the polypeptide with a test compound; and

b) detecting the level of activity of GLUTX having the amino acid sequence of SEQ ID NO:2 in the presence of the test compound, wherein a difference in activity in the presence of the test compound compared to the activity in the absence of the test compound indicates

that the test compound modulates the activity of GLUTX.

23. The method of claim 22, wherein the compound is selected from the group consisting of polypeptides, ribonucleic acids, small molecules, ribozymes, antisense oligonucleotides, and deoxyribonucleic acids.

24. A method for modulating hexose uptake, the method comprising modulating the expression or activity of a gene encoding the amino acid sequence of SEQ ID NO:2.

25. A method for treating a patient having a disorder associated with aberrant expression or activity of a gene encoding the amino acid sequence of SEQ ID NO:2, the method comprising administering a therapeutically effective amount of a compound that decreases the expression or activity of the gene.

26. The method of claim 25, wherein the compound is selected from the group consisting of polypeptides, ribonucleic acids, small molecules, ribozymes, antisense oligonucleotides, and deoxyribonucleic acids.

27. A method for treating a patient having a disorder associated with aberrant expression or activity of a GLUTX polypeptide comprising the amino acid sequence of SEQ ID NO:2, the method comprising administering a therapeutically effective amount of a compound that increases the expression or activity of the gene.

28. The method of claim 27, wherein the compound is selected from the group consisting of polypeptides, ribonucleic acids, small molecules, ribozymes, antisense